#### Ravensdale

#### Lake Overview

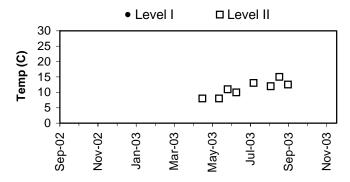
Volunteers monitored Ravensdale Lake from 1996 – 1998, and again in 2002-2003. The data collected suggest that this lake is relatively low in primary productivity (oligotrophic - mesotrophic) with very good water quality. There is one Class 1 and two Class 2 wetlands in the watershed, while the shoreline of the lake is part of a Class 2 wetland system (King County, 1990). Land use analysis of 2002 aerial photographs showed less than 1% of the surrounding watershed has been developed for uses other than agriculture or forestry.

Ravensdale Lake has no public access boat launch. Lake users should keep a close eye on aquatic plants growing nearshore to catch infestations of Eurasian milfoil, Brazilian elodea or other aquatic noxious weeds.

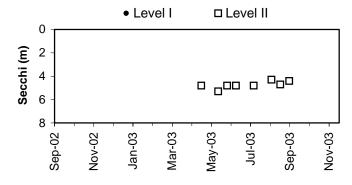
# **Physical Parameters**

Secchi transparency was collected from late April through early September, ranging between 4.3 and 5.3m through the period. Surface water temperatures reached a maximum of 15.0 degrees Celsius during the same time. There were no precipitation or water level records.

#### Lake Temperature



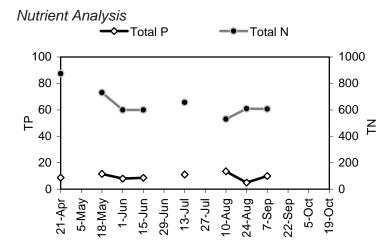
#### Secchi Depth



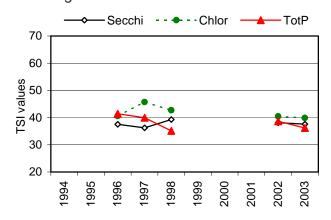
Lake Level and Precipitation

No Data Available

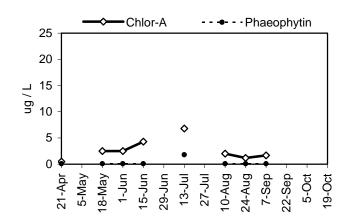
#### Ravensdale



#### TSI Ratings



#### Chlorophyll a Concentrations (ug/L)



### Common algae Group

_	3				
	unidentified species	chrysophyte			
	Cryptomonas spp	cryptophyte			
	unidentified filamentous algae	chlorophyte			

# Nutrient Analysis and TSI Ratings

Total phosphorus and total nitrogen remained relatively stable through the period sampled, although the N:P ratio ranged from 39 to 122. In 2003 the three average TSI values were close together in the upper range of oligotrophy, slightly lower than in 2002.

# Chlorophyll and Algae

Chlorophyll was generally low through the sample period, reaching a small peak in mid-July. The algae in the plankton were dominated by unidentified chrysophyte species, various *Cryptomonas* species, and an unidentified filament in the chlorophyte group. Dinoflagellates such as *Ceratium* and *Peridineum* were common, as well as several different bottom-dwelling diatom species.

Ravensdale 2003 Level I Data

# No Level I Data Available For This Lake

Ravensdale 2003 Level II Data

Date	Temp	Secchi	Chl-a	TP	TN	Algae	N:P	Calculated TSI		TSI	
(2003)	(°C)	(m)	(μg/l)	(μg/l)	(μg/l)	Obsv.			chl-a	TP	Notes
21-Apr	8.0	4.8	0.6	8.7	874	0	100	37.4		35.4	Chlor-a value was <mdl.< td=""></mdl.<>
											Reported as .6μgl.
5-May											No sample.
40.14					-0.4				20.0		
18-May	8.0	5.3	2.5	11.5	731	1	64	35.9	39.6	39.4	
1-Jun	11.0	4.8	2.5	8.0	600	1	75	37.4	39.6	34.1	
1-Juli	11.0	4.0	2.5	6.0	000	, I	75	37.4	39.0	34.1	
15-Jun	10.0	4.8	4.3	8.6	600	1	70	37.4	44.9	35.2	
10 0011	10.0	7.0	7.0	0.0	000	•	70	07.4	44.0	00.2	
29-Jun											No sample.
13-Jul	13.0	4.8	6.8	11.1	657	1	59	37.4	49.4	38.9	
27-Jul											No sample.
10-Aug	12.0	4.3	2.0	13.5	530	1	39	39.0	37.5	41.7	
24-Aug	15.0	4.7	1.2	5.0	610	1	122	37.7	32.4	27.4	
7.0	40.5		4 =	40.0	007		0.4	00.0	05.7	07.4	
7-Sep	12.5	4.4	1.7	10.0	607	1	61	38.6	35.7	37.4	
21-Sep											No sample.
21-3ep											ino sample.
6-Oct											No sample.
0 000											Tro campio.
20-Oct											No sample.
											·
	Temp	Secchi	Chl-a	TP	TN	Algae	N:P	Calculated TSI		TSI	
	(°C)	(m)	(μg/l)	(μg/l)	(μg/l)	Obsv.		Secc	chl-a	TP	
Mean	11.2	4.7	2.7	9.6	651.1	0.9	74	37.6	39.9	36.2	TSI Average = 37.9
Median	11.5	4.8	2.3	9.4	608.5	1	67	37.4	39.6	36.4	
Min	8.0	4.3	0.6	5.0	530.0	0	39	35.9	32.4	27.4	
Max	15.0	5.3	6.8	13.5	874.0	1	122	39.0	49.4	41.7	
Count	8	8	8	8	8	8	8	8	7	8	